



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no response is required to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	4623
				Examiner Name	LAURA MCGILLEN
Sheet	1	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
LM	1	Ameer, G. A., T. A. Mahmood, et al. (2002). "A biodegradable composite scaffold for cell transplantation." <i>Journal of Orthopaedic Research</i> 20(1):16-19		
LM	2	Asanuma, K., R. Magid, et al. (2003). "Uniaxial strain upregulates matrix-degrading enzymes produced by human vascular smooth muscle cells." <i>Am J. Physiol Heart Circ Physiol</i> 284:H1778-H1784		
LM	3	Bach, A. D., H. Bannasch, et al. (2001). "Fibrin glue as matrix for cultured autologous urothelial cells in urethral reconstruction." <i>Tissue Engineering</i> 7(1):45-53		
LM	4	Bader, A., G. Steinhoff, et al. (2000). "Engineering of human vascular aortic tissue based on a xenogeneic starter matrix." <i>Transplantation</i> 70(1):7-14		
LM	5	Barocas, V. H., T. S. Gorton, et al. (1998). "Engineered alignment in media equivalents: magnetic prealignment and mandrel compaction." <i>J Biomech Eng</i> 120(5):660-6		
LM	6	Bini, A., K. G. Mann, et al. (1999). "Noncollagenous bone matrix proteins, calcification, and thrombosis in carotid artery atherosclerosis." <i>Arteriosclerosis, Thrombosis & Vascular Biology</i> 19(8):1852-61		
LM	7	Bunce, L. A., L. A. Sporn, et al. (1992). "Endothelial cell spreading on fibrin requires fibrinopeptide B cleavage and amino acid residues 15-42 of the beta chain." <i>Journal of Clinical Investigation</i> 89(3):842-50		
LM	8	Clark, R. A., L. D. Nielsen, et al. (1995). "Collagen matrices attenuate the collagen-synthetic response of cultured fibroblasts to TGF-beta." <i>Journal of Cell Science</i> 108(Pt 3):1251-61		
LM	9	Drury, J. K., T. R. Ashton, et al. (1987). "Experimental and clinical experience with a gelatin impregnated Dacron prosthesis." <i>Annals of Vascular Surgery</i> 1(5):542-7		
LM	10	Dvorak, H. F., V. S. Harvey, et al. (1987). "Fibrin containing gels induce angiogenesis. Implications for tumor stroma generation and wound healing." <i>Laboratory Investigation</i> 57(6):673-86		
LM	11	Ferri, N., L. Arnaboldi, et al. (2001). "Effect of S(-) perillic acid on protein prenylation and arterial smooth muscle cell proliferation." <i>Biochemical Pharmacology</i> 62(12):1637-45		

Examiner Signature	Laura McGillen	Date Considered	3/24/2006
--------------------	----------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	4623 1636
				Examiner Name	Laura McGullen
				Attorney Docket Number	19226/2231 (R-5786)
Sheet	2	of	6		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
LM	12	Ferri, F., M. Greco, et al. (2001). "Growth kinetics and structure of fibrin gels." <i>Physical Review E</i> 63:031401-1 to 031401-10	
LM	13	Freischlag, J. A. and W. S. Moore (1990). "Clinical experience with a collagen-impregnated knitted Dacron vascular graft." <i>Annals of Vascular Surgery</i> 4(5):449-54	
LM	14	Girton, T. S., V. H. Barocas, et al. (2002). "Confined compression of a tissue-equivalent: Collagen fibril and cell alignment in response to anisotropic strain." <i>Journal of Biomechanical Engineering</i> 124(5):568-75	
LM	15	Grassl, E. D., T. R. Oegema, et al. (2002). "Fibrin as an alternative biopolymer to type-I collagen for the fabrication of a media equivalent." <i>J Biomed Mater Res</i> 60(4):607-12	
LM	16	Hall, H., T. Baechi, J.A. Hubbell (2001). "Molecular properties of fibrin-based matrices for promotion of angiogenesis in vitro." <i>Microvascular Research</i> 62:315-326	
LM	17	Hoerstrup, S.P., A. Kadner, et al. (2002). "Living, autologous pulmonary artery conduits tissue engineered from human umbilical cord cells." <i>Ann Thorac Surg</i> 74:46-52	
LM	18	Hoerstrup, S. P., R. Sodian, et al. (2000). "Functional living trileaflet heart valves grown in vitro." <i>Circulation</i> 102(Suppl 3):III44-9	
LM	19	Hoerstrup, S. P., G. Zund, et al. (2002). "A new approach to completely autologous cardiovascular tissue in humans." <i>ASAIO Journal</i> 48(3):234-8	
LM	20	Hoerstrup, S. P., G. Zund, et al. (2001). "Tissue engineering of small caliber vascular grafts." <i>European Journal of Cardio-Thoracic Surgery</i> 20:164-9	
LM	21	Huynh, T., G. Abraham, et al. (1999). "Remodeling of an acellular collagen graft into a physiologically responsive neovessel." <i>Nature Biotechnology</i> 17(11):1083-6	
LM	22	Jockenhoevel, S., G. Zund, et al. (2001). "Fibrin gel -- advantages of a new scaffold in cardiovascular tissue engineering." <i>European Journal of Cardio-Thoracic Surgery</i> 19:424-30	

Examiner Signature	Laura McGullen	Date Considered	3/24/2006
--------------------	----------------	-----------------	-----------

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	1629 1636
				Examiner Name	LAURA MCGILLEM
Sheet	3	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials ²	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ³	
LM	23	Jones, P. A. (1979). "Construction of an artificial blood vessel wall from cultured endothelial and smooth muscle cells." <i>Proceedings of the National Academy of Sciences of the United States of America</i> 76(4):1882-6		
LM	24	Kaushal, S., G. E. Amiel, et al. (2001). "Functional small-diameter neovessels created using endothelial progenitor cells expanded ex vivo." <i>Nature Medicine</i> 7(9):1035-40		
LM	25	Kent, K. C., A. Oshima, et al. (1988). "An in vitro model for human endothelial cell seeding of a small diameter vascular graft." <i>ASAIO Transactions</i> 34(3):578-80		
LM	26	Kodama, M., M. Naito, et al. (2002). "Role of D and E domains in the migration of vascular smooth muscle cells into fibrin gels." <i>Life Sciences</i> 71(10):1139-48		
LM	27	Kumar, T. R. and L. K. Krishnan (2001). "Endothelial cell growth factor (ECGF) enmeshed with fibrin matrix enhances proliferation of EC in vitro." <i>Biomaterials</i> 22(20):2769-76		
LM	28	Lee, J., K. C. Choi, et al. (1995). "Impairment of endothelium-dependent vasorelaxation in chronic two-kidney, one clip hypertensive rats." <i>Nephrology Dialysis Transplantation</i> 10(5):619-23		
LM	29	L'Heureux, N., L. Germain, et al. (1993). "In vitro construction of a human blood vessel from cultured vascular cells: A morphologic study." <i>Journal of Vascular Surgery</i> 17(3):499-509		
LM	30	L'Heureux, N., S. Paquet, et al. (1998). "A completely biological tissue-engineered human blood vessel." <i>FASEB Journal</i> 12(1):47-56		
LM	31	L'Heureux, N., J. C. Stoclet, et al. (2001). "A human tissue-engineered vascular media: A new model for pharmacological studies of contractile responses." <i>FASEB Journal</i> 15(2):515-24		
LM	32	Long, J.L., R.T. Tranquillo (2003). "Elastic fiber production in cardiovascular tissue-equivalents." <i>Matrix Biology</i> 22:339-350		
LM	33	Malone, J. M., K. Brendel, et al. (1984). "Detergent-extracted small-diameter vascular prostheses." <i>Journal of Vascular Surgery</i> 1(1):181-91		

Examiner Signature	Laura McGillem	Date Considered	3/24/2006
--------------------	----------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	1623 1636
				Examiner Name	LAVIA McGILLER
Sheet	4	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ²	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Jm	34	Meredith, J. E., Jr., B. Fazeli, et al. (1993). "The extracellular matrix as a cell survival factor." <i>Molecular Biology of the Cell</i> 4(9):953-61	
	35	Naito, M. (2000). "Effects of fibrinogen, fibrin and their degradation products on the behaviour of vascular smooth muscle cells." <i>Japanese Journal of Geriatrics</i> 37(6):458-63	✓
Jm	36	Naito, M., C. M. Stirk, et al. (2000). "Smooth muscle cell outgrowth stimulated by fibrin degradation products: The potential role of fibrin fragment E in restenosis and atherogenesis." <i>Thrombosis Research</i> 98(2):165-74	
Jm	37	Neidert, M. R., E. S. Lee, et al. (2002). "Enhanced fibrin remodeling in vitro with TGF-beta1, insulin and plasmin for improved tissue-equivalents." <i>Biomaterials</i> 23(17):3717-31	
Sm	38	Niewiarowski, S., E. Regoeczi, et al. (1972). "Adhesion of fibroblasts to polymerizing fibrin and retraction of fibrin induced by fibroblasts." <i>Proceedings of the Society for Experimental Biology & Medicine</i> 140(1):199-204	
Sm	39	Niewiarowski, S., E. Regoeczi, et al. (1972). "Platelet interaction with fibrinogen and fibrin: Comparison of the interaction of platelets with that of fibroblasts, leukocytes, and erythrocytes." <i>Annals of the New York Academy of Sciences</i> 201:72-83	
LA	40	Niklason, L. E., W. Abbott, et al. (2001). "Morphologic and mechanical characteristics of engineered bovine arteries." <i>J Vasc Surg</i> 33(3):628-38	
Sm	41	Niklason, L. E., J. Gao, et al. (1999). "Functional arteries grown in vitro." <i>Science</i> 284(5413):489-93	
Sm	42	Pasic, M., W. Muller-Glauser, et al. (1995). "Seeding with omental cells prevents late neointimal hyperplasia in small-diameter Dacron grafts." <i>Circulation</i> 92(9):2605-16	
Sm	43	Rosenquist, T. H. and L. Modis (1991). "Spatial disorder of collagens in the great vessels, associated with congenital heart defects." <i>Anatomical Record</i> 229(1):116-24	
Sm	44	Ross, J.J., R.T. Tranquillo (2003). "ECM gene expression correlates with in vitro tissue growth and development in fibrin gel remodeled by neonatal smooth muscle cells." <i>Matrix Biology</i> 22:477-490	

Examiner Signature	Laura McGiller	Date Considered	3/24/2006
--------------------	----------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Not considered,
IN JAPANESE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	1623 1636
				Examiner Name	LAURA MOGILLEN
Sheet	5	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
LM	45	Schrenk, P., G. S. Kobinia, et al. (1987). "Fibrin glue coating of e-PTFE prostheses enhances seeding of human endothelial cells." <i>Thoracic & Cardiovascular Surgeon</i> 35(1):6-10		
LM	46	Seliktar, D., R. A. Black, et al. (2000). "Dynamic mechanical conditioning of collagen-gel blood vessel constructs induces remodeling in vitro." <i>Annals of Biomedical Engineering</i> 28(4):351-62.		
LM	47	Seliktar, D., R.M. Nerem, et al. (2003). "Mechanical strain-stimulated remodeling of tissue-engineered blood vessel constructs." <i>Tissue Engineering</i> 9(4):657-666		
LM	48	Shainoff, J. R., G. B. Smejkal, et al. (2002). "Allosteric effects potentiating the release of the second fibrinopeptide A from fibrinogen by thrombin." <i>Journal of Biological Chemistry</i> 277(22):19367-73		
LM	49	Shin'oka, T., Y. Imai, et al. (2001). "Transplantation of a tissue-engineered pulmonary artery." <i>New England Journal of Medicine</i> 344(7):532-3		
LM	50	Shin'oka, T., D. Shum-Tim, et al. (1998). "Creation of viable pulmonary artery autografts through tissue engineering." <i>Journal of Thoracic & Cardiovascular Surgery</i> 115(3):536-45; discussion 545-6		
LM	51	Siebenlist, K. R., D. A. Meh, et al. (2001). "Protransglutaminase (factor XIII) mediated crosslinking of fibrinogen and fibrin." <i>Thrombosis & Haemostasis</i> 86(5):1221-8		
LM	52	Stegemann, J. P. and R. M. Nerem (2003). "Altered response of vascular smooth muscle cells to exogenous biochemical stimulation in two- and three-dimensional culture." <i>Experimental Cell Research</i> 283(2):146-55		
LM	53	Szilagyi, D. E., J. P. Elliott, Jr., et al. (1986). "A thirty-year survey of the reconstructive surgical treatment of aortoiliac occlusive disease." <i>Journal of Vascular Surgery</i> 3(3):421-36		
LM	54	Thie, M., W. Schlumberger, et al. (1991). "Aortic smooth muscle cells in collagen lattice culture: Effects on ultrastructure, proliferation and collagen synthesis." <i>European Journal of Cell Biology</i> 55(2):295-304		
LM	55	Tranquillo, R. T. (1999). "Self-organization of tissue-equivalents: The nature and role of contact guidance." <i>Biochem Soc Symp</i> 65:27-42		

Examiner Signature	Laura M. Willen	Date Considered	3/24/2006
--------------------	-----------------	-----------------	-----------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

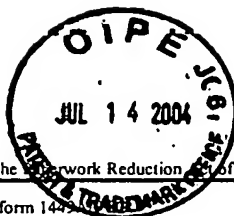
Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	1623-1676
				Examiner Name	LAURA MC GILLEN
Sheet	6	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials ²	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ³	
LM	56	Tuan, T. L., A. Song, et al. (1996). "In vitro fibroplasia: Matrix contraction, cell growth, and collagen production of fibroblasts cultured in fibrin gels." <i>Experimental Cell Research</i> 223(1):127-34		
LM	57	Voorhees, A. J. A., Blakemore AH. (1952). "The use of tubes constructed from Vinyon "N" cloth in bridging arterial defects." <i>Ann Surg</i> 135:332-336		
LM	58	Weinberg, C. B. and E. Bell (1986). "A blood vessel model constructed from collagen and cultured vascular cells." <i>Science</i> 231(4736):397-400		
LM	59	Williams, S. K., D. G. Rose, et al. (1994). "Microvascular endothelial cell sodding of ePTFE vascular grafts: Improved patency and stability of the cellular lining." <i>Journal of Biomedical Materials Research</i> 28(2):203-12		
LM	60	Wilson, G. J., D. W. Courtman, et al. (1995). "Acellular matrix: A biomaterials approach for coronary artery bypass and heart valve replacement." <i>Annals of Thoracic Surgery</i> 60(2 Suppl):S353-8		
LM	61	Ye, Q., G. Zund, et al. (2000). "Fibrin gel as a three dimensional matrix in cardiovascular tissue engineering." <i>European Journal of Cardio-Thoracic Surgery</i> 17(5):587-91		
LM	62	Niewiarowski, S. (1973). "Interaction of Fibrin with Various Cells," <i>Thromb Diath Haemorrh Suppl</i> 56:51-61 (1973)		
LM	63	Selikar, D., R.M. Nerem et al., (2001). "The Role of Matrix Metalloproteinase-2 in the remodeling of cell-seeded vascular constructs subjected to cyclin strain." <i>Annals of Biomedical Engineering</i> 29:923-934		
LM	64	Grassl, E.D., T.R. Degema et al., (2003). "A Fibrin-Based Arterial Media Equivalent." <i>J. Biomed Mat Res</i> 66A:550-61.		

Examiner Signature	Laura McGillen	Date Considered	3/24/2006
--------------------	----------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/692,381		
		Filing Date	October 23, 2003		
		First Named Inventor	Swartz et al.		
		Art Unit	1623-1636		
		Examiner Name	To Be Assigned Laura McGiblin		
Sheet	1	of	1	Attorney Docket Number	19226/2231 (R-5786)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
LM	1	US-5,223,420	06/29/1993	Rabaud et al.	
LM	2	US-5,989,244	11/23/1999	Gregory et al.	
LM	3	US-2001/0044654 A1	11/22/2001	Chen et al.	
LM	4	US-2003/0072741 A1	04/17/2003	Berglund et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
LM	5	WO 00/73399 A1	12/07/2000	WIPO		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁷

Examiner Signature	Laura McGiblin	Date Considered	3/24/2004
--------------------	----------------	-----------------	-----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	1623 1636
				Examiner Name	LAURA MCGILLEN
Sheet	1	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Ameer, G. A., T. A. Mahmood, et al. (2002). "A biodegradable composite scaffold for cell transplantation." <i>Journal of Orthopaedic Research</i> 20(1):16-19	
	2	Asanuma, K., R. Magid, et al. (2003). "Uniaxial strain upregulates matrix-degrading enzymes produced by human vascular smooth muscle cells." <i>Am J. Physiol Heart Circ Physiol</i> 284:H1778-H1784	
	3	Bach, A. D., H. Bannasch, et al. (2001). "Fibrin glue as matrix for cultured autologous urothelial cells in urethral reconstruction." <i>Tissue Engineering</i> 7(1):45-53	
	4	Bader, A., G. Steinhoff, et al. (2000). "Engineering of human vascular aortic tissue based on a xenogeneic starter matrix." <i>Transplantation</i> 70(1):7-14	
	5	Barocas, V. H., T. S. Gorton, et al. (1998). "Engineered alignment in media equivalents: magnetic prealignment and mandrel compaction." <i>J Biomech Eng</i> 120(5):660-6	
	6	Bini, A., K. G. Mann, et al. (1999). "Noncollagenous bone matrix proteins, calcification, and thrombosis in carotid artery atherosclerosis." <i>Arteriosclerosis, Thrombosis & Vascular Biology</i> 19(8):1852-61	
	7	Bunce, L. A., L. A. Sporn, et al. (1992). "Endothelial cell spreading on fibrin requires fibrinopeptide B cleavage and amino acid residues 15-42 of the beta chain." <i>Journal of Clinical Investigation</i> 89(3):842-50	
	8	Clark, R. A., L. D. Nielsen, et al. (1995). "Collagen matrices attenuate the collagen-synthetic response of cultured fibroblasts to TGF-beta." <i>Journal of Cell Science</i> 108(Pt 3):1251-61	
	9	Drury, J. K., T. R. Ashton, et al. (1987). "Experimental and clinical experience with a gelatin impregnated Dacron prosthesis." <i>Annals of Vascular Surgery</i> 1(5):542-7	
	10	Dvorak, H. F., V. S. Harvey, et al. (1987). "Fibrin containing gels induce angiogenesis. Implications for tumor stroma generation and wound healing." <i>Laboratory Investigation</i> 57(6):673-86	
	11	Ferri, N., L. Arnaboldi, et al. (2001). "Effect of S(-) perillidic acid on protein prenylation and arterial smooth muscle cell proliferation." <i>Biochemical Pharmacology</i> 62(12):1637-45	

Examiner Signature	Laura McGillem	Date Considered	3/24/2006
--------------------	----------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10/692,381	
			Filing Date	October 23, 2003	
			First Named Inventor	Swartz et al.	
			Group Art Unit	1623-1636	
			Examiner Name	LAURA MCGILLEN	
Sheet	2	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	12	Ferri, F., M. Greco, et al. (2001). "Growth kinetics and structure of fibrin gels." <i>Physical Review E</i> 63:031401-1 to 031401-10.	
	13	Freischlag, J. A. and W. S. Moore (1990). "Clinical experience with a collagen-impregnated knitted Dacron vascular graft." <i>Annals of Vascular Surgery</i> 4(5):449-54	
	14	Girton, T. S., V. H. Barocas, et al. (2002). "Confined compression of a tissue-equivalent: Collagen fibril and cell alignment in response to anisotropic strain." <i>Journal of Biomechanical Engineering</i> 124(5):568-75	
	15	Grassl, E. D., T. R. Oegema, et al. (2002). "Fibrin as an alternative biopolymer to type-I collagen for the fabrication of a media equivalent." <i>J Biomed Mater Res</i> 60(4):607-12	
	16	Hall, H., T. Baechi, J.A. Hubbell (2001). "Molecular properties of fibrin-based matrices for promotion of angiogenesis in vitro." <i>Microvascular Research</i> 62:315-326	
	17	Hoerstrup, S.P., A. Kadner, et al. (2002). "Living, autologous pulmonary artery conduits tissue engineered from human umbilical cord cells." <i>Ann Thorac Surg</i> 74:46-52	
	18	Hoerstrup, S. P., R. Sodian, et al. (2000). "Functional living trileaflet heart valves grown in vitro." <i>Circulation</i> 102(Suppl 3):III44-9	
	19	Hoerstrup, S. P., G. Zund, et al. (2002). "A new approach to completely autologous cardiovascular tissue in humans." <i>ASAIO Journal</i> 48(3):234-8	
	20	Hoerstrup, S. P., G. Zund, et al. (2001). "Tissue engineering of small caliber vascular grafts." <i>European Journal of Cardio-Thoracic Surgery</i> 20:164-9	
	21	Huynh, T., G. Abraham, et al. (1999). "Remodeling of an acellular collagen graft into a physiologically responsive neovessel." <i>Nature Biotechnology</i> 17(11):1083-6	
	22	Jockenhoevel, S., G. Zund, et al. (2001). "Fibrin gel -- advantages of a new scaffold in cardiovascular tissue engineering." <i>European Journal of Cardio-Thoracic Surgery</i> 19:424-30	

Examiner Signature	Laura McGillen	Date Considered	3/24/2004
--------------------	----------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

duplicates

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	4623 1636
				Examiner Name	LAVRA MCGILLEN
Sheet	3	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	23	Jones, P. A. (1979). "Construction of an artificial blood vessel wall from cultured endothelial and smooth muscle cells." <i>Proceedings of the National Academy of Sciences of the United States of America</i> 76(4):1882-6	
	24	Kaushal, S., G. E. Amiel, et al. (2001). "Functional small-diameter neovessels created using endothelial progenitor cells expanded ex vivo." <i>Nature Medicine</i> 7(9):1035-40	
	25	Kent, K. C., A. Oshima, et al. (1988). "An in vitro model for human endothelial cell seeding of a small diameter vascular graft." <i>ASAIO Transactions</i> 34(3):578-80	
	26	Kodama, M., M. Naito, et al. (2002). "Role of D and E domains in the migration of vascular smooth muscle cells into fibrin gels." <i>Life Sciences</i> 71(10):1139-48	
	27	Kumar, T. R. and L. K. Krishnan (2001). "Endothelial cell growth factor (ECGF) enmeshed with fibrin matrix enhances proliferation of EC in vitro." <i>Biomaterials</i> 22(20):2769-76	
	28	Lee, J., K. C. Choi, et al. (1995). "Impairment of endothelium-dependent vasorelaxation in chronic two-kidney, one clip hypertensive rats." <i>Nephrology Dialysis Transplantation</i> 10(5):619-23	
	29	L'Heureux, N., L. Germain, et al. (1993). "In vitro construction of a human blood vessel from cultured vascular cells: A morphologic study." <i>Journal of Vascular Surgery</i> 17(3):499-509	
	30	L'Heureux, N., S. Paquet, et al. (1998). "A completely biological tissue-engineered human blood vessel." <i>FASEB Journal</i> 12(1):47-56	
	31	L'Heureux, N., J. C. Stoclet, et al. (2001). "A human tissue-engineered vascular media: A new model for pharmacological studies of contractile responses." <i>FASEB Journal</i> 15(2):515-24	
	32	Long, J.L., R.T. Tranquillo (2003). "Elastic fiber production in cardiovascular tissue-equivalents." <i>Matrix Biology</i> 22:339-350	
	33	Malone, J. M., K. Brendel, et al. (1984). "Detergent-extracted small-diameter vascular prostheses." <i>Journal of Vascular Surgery</i> 1(1):181-91	

Examiner Signature	Laura Medile	Date Considered	3/24/2006
--------------------	--------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	1623 1636
				Examiner Name	LAURA MCG. LLEWELLYN
Sheet	4	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	34	Meredith, J. E., Jr., B. Fazeli, et al. (1993). "The extracellular matrix as a cell survival factor." <i>Molecular Biology of the Cell</i> 4(9):953-61	
	35	Naito, M. (2000). "Effects of fibrinogen, fibrin and their degradation products on the behaviour of vascular smooth muscle cells." <i>Japanese Journal of Geriatrics</i> 37(6):458-63	✓
	36	Naito, M., C. M. Stirk, et al. (2000). "Smooth muscle cell outgrowth stimulated by fibrin degradation products: The potential role of fibrin fragment E in restenosis and atherogenesis." <i>Thrombosis Research</i> 98(2):165-74	
	37	Neidert, M. R., E. S. Lee, et al. (2002). "Enhanced fibrin remodeling in vitro with TGF-beta1, insulin and plasmin for improved tissue equivalents." <i>Biomaterials</i> 23(17):3717-31	
	38	Niewiarowski, S., E. Regoeczi, et al. (1972). "Adhesion of fibroblasts to polymerizing fibrin and retraction of fibrin induced by fibroblasts." <i>Proceedings of the Society for Experimental Biology & Medicine</i> 140(1):199-204	
	39	Niewiarowski, S., E. Regoeczi, et al. (1972). "Platelet interaction with fibrinogen and fibrin: Comparison of the interaction of platelets with that of fibroblasts, leukocytes, and erythrocytes." <i>Annals of the New York Academy of Sciences</i> 201:72-83	
	40	Niklason, L. E., W. Abbott, et al. (2001). "Morphologic and mechanical characteristics of engineered bovine arteries." <i>J Vasc Surg</i> 33(3):628-38	
	41	Niklason, L. E., J. Gao, et al. (1999). "Functional arteries grown in vitro." <i>Science</i> 284(5413):489-93	
	42	Pasic, M., W. Muller-Glauser, et al. (1995). "Seeding with omental cells prevents late neointimal hyperplasia in small-diameter Dacron grafts." <i>Circulation</i> 92(9):2605-16	
	43	Rosenquist, T. H. and L. Modis (1991). "Spatial disorder of collagens in the great vessels, associated with congenital heart defects." <i>Anatomical Record</i> 229(1):116-24	
	44	Ross, J.J., R.T. Tranquillo (2003). "ECM gene expression correlates with in vitro tissue growth and development in fibrin gel remodeled by neonatal smooth muscle cells." <i>Matrix Biology</i> 22:477-490	

Examiner Signature	Laura M. McG. Llewellyn	Date Considered	3/24/2006
--------------------	-------------------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

duplicates

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	4623 1636
				Examiner Name	LAURA MCGILLEN
Sheet	5	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	45	Schrenk, P., G. S. Kobinia, et al. (1987). "Fibrin glue coating of e-PTFE prostheses enhances seeding of human endothelial cells." <i>Thoracic & Cardiovascular Surgeon</i> 35(1):6-10	
	46	Seliktar, D., R. A. Black, et al. (2000). "Dynamic mechanical conditioning of collagen gel blood vessel constructs induces remodeling in vitro." <i>Annals of Biomedical Engineering</i> 28(4):351-62.	
	47	Seliktar, D., R.M. Nerem, et al. (2003). "Mechanical strain-stimulated remodeling of tissue-engineered blood vessel constructs." <i>Tissue Engineering</i> 9(4):657-666	
	48	Shainoff, J. R., G. B. Smejkal, et al. (2002). "Allosteric effects potentiating the release of the second fibrinopeptide A from fibrinogen by thrombin." <i>Journal of Biological Chemistry</i> 277(22):19367-73	
	49	Shin'oka, T., Y. Imai, et al. (2001). "Transplantation of a tissue-engineered pulmonary artery." <i>New England Journal of Medicine</i> 344(7):532-3	
	50	Shin'oka, T., D. Shum-Tim, et al. (1998). "Creation of viable pulmonary artery autografts through tissue engineering." <i>Journal of Thoracic & Cardiovascular Surgery</i> 115(3):536-45; discussion 545-6	
	51	Siebenlist, K. R., D. A. Meh, et al. (2001). "Protransglutaminase (factor XIII) mediated crosslinking of fibrinogen and fibrin." <i>Thrombosis & Haemostasis</i> 86(5):1221-8	
	52	Stegemann, J. P. and R. M. Nerem (2003). "Altered response of vascular smooth muscle cells to exogenous biochemical stimulation in two- and three-dimensional culture." <i>Experimental Cell Research</i> 283(2):146-55	
	53	Szilagyi, D. E., J. P. Elliott, Jr., et al. (1986). "A thirty-year survey of the reconstructive surgical treatment of aortoiliac occlusive disease." <i>Journal of Vascular Surgery</i> 3(3):421-36	
	54	Thie, M., W. Schlumberger, et al. (1991). "Aortic smooth muscle cells in collagen lattice culture: Effects on ultrastructure, proliferation and collagen synthesis." <i>European Journal of Cell Biology</i> 55(2):295-304	
	55	Tranquillo, R. T. (1999). "Self-organization of tissue-equivalents: The nature and role of contact guidance." <i>Biochem Soc Symp</i> 65:27-42	

Examiner Signature	<i>Laura McGillen</i>	Date Considered	3/26/2006
--------------------	-----------------------	-----------------	-----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

duplicates

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/692,381
				Filing Date	October 23, 2003
				First Named Inventor	Swartz et al.
				Group Art Unit	4623.1636
				Examiner Name	LAURA MCGILLER
Sheet	6	of	6	Attorney Docket Number	19226/2231 (R-5786)

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ²	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ³
	56	Tuan, T. L., A. Song, et al. (1996). "In vitro fibroplasia: Matrix contraction, cell growth, and collagen production of fibroblasts cultured in fibrin gels." <i>Experimental Cell Research</i> 223(1):127-34	
	57	Voorhees, A. J. A., Blakemore AH. (1952). "The use of tubes constructed from Vinyon "N" cloth in bridging arterial defects." <i>Ann Surg</i> 135:332-336	
	58	Weinberg, C. B. and E. Bell (1986). "A blood vessel model constructed from collagen and cultured vascular cells." <i>Science</i> 231(4736):397-400	
	59	Williams, S. K., D. G. Rose, et al. (1994). "Microvascular endothelial cell seeding of ePTFE vascular grafts: Improved patency and stability of the cellular lining." <i>Journal of Biomedical Materials Research</i> 28(2):203-12	
	60	Wilson, G. J., D. W. Courtman, et al. (1995). "Acellular matrix: A biomaterials approach for coronary artery bypass and heart valve replacement." <i>Annals of Thoracic Surgery</i> 60(2 Suppl):S353-8	
	61	Ye, Q., G. Zund, et al. (2000). "Fibrin gel as a three dimensional matrix in cardiovascular tissue engineering." <i>European Journal of Cardio-Thoracic Surgery</i> 17(5):587-91	
	62	Niewiarowski, S. (1973). "Interaction of Fibrin with Various Cells," <i>Thromb Diath Haemorrh Suppl</i> 56:51-61 (1973)	
	63	Selikor, D., R.M. Nerem et al., (2001). "The Role of Matrix Metalloproteinase-2 in the remodeling of cell-seeded vascular constructs subjected to cyclin strain." <i>Annals of Biomedical Engineering</i> 29:923-934	
	64	Grassl, E.D., T.R. Degema et al., (2003). "A Fibrin-Based Arterial Media Equivalent." <i>J. Biomed Mat Res</i> 66A:550-61.	

Examiner Signature	<i>Laura McGiller</i>	Date Considered	3/24/2006
--------------------	-----------------------	-----------------	-----------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Applicant's unique citation designation number (optional). ³ Applicant is to place a check mark here if English language Translation is attached.